



ECONOMICS & GLOBAL MARKETS RESEARCH

WHY HOUSE PRICES BEHAVE WHEN THREATENED...MOST OF THE TIME

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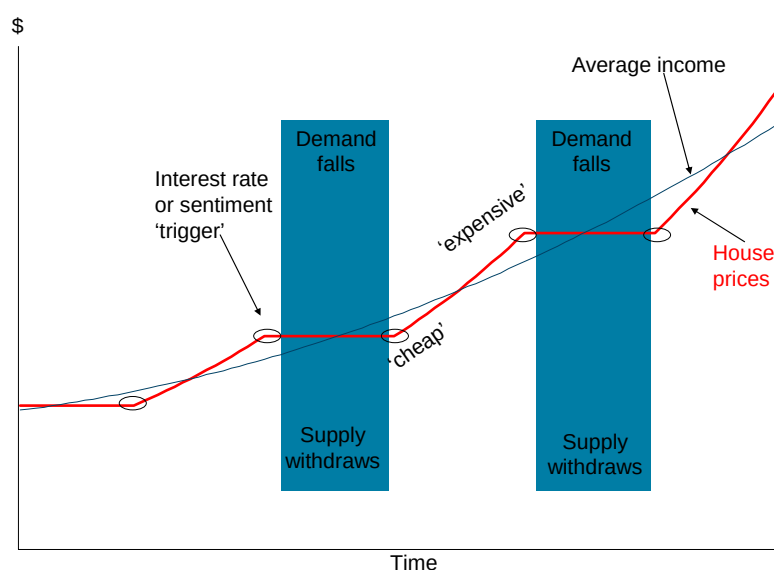
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SUMMARY

- The 'trading' market for housing and 'fundamentals' are very different beasts. Knowing the difference is critical to understanding the dynamics of house price behaviour.
- The dwelling 'shortage' (which is likely to persist beyond the medium-term) has been presented as only one of several key drivers behind Australia's solid house price performance in recent years. (See [Housing Overvaluation](#)). The shortage has had influence over house prices but the transmission mechanism is not transparent, depending on the *interaction* between 'fundamental' influences and 'trading' market conditions.
- While Australia's housing market has considerable building supply-side rigidities, 'trading' supply is highly flexible. Demand-side headwinds are generally countered by supply withdrawal, resulting, in most instances, in a 'side-ways drift' in house prices.
- Net divestment of residential holdings by retiring 'baby-boomers' is unlikely to destabilise the market. The supply offering, if it does occur, will be gradual and over a long time horizon. More importantly, there will be a sufficient number of younger (investing) 'demand cohorts' on the other side of the market.
- An extended period of 'sideways prices drift' expected through 2011 will consolidate foundations for current price levels, reducing further the already low risk of a more substantial decline.

FIGURE 1. STYLISTED HOUSE PRICE CYCLES UNDER 'NORMAL MARKET' CONDITIONS



Source: ANZ Economics & Global Markets Research

Source: ANZ

WHAT'S THE DIFFERENCE?

In order to have meaningful discussion about house prices, it is critical to know the difference between '*fundamental*' demand/supply and '*trading*' demand/supply. This note explains the difference and puts some parameters around the two very distinct and often misconstrued concepts.

The *fundamental* market is a framework based around the need for and provision of *shelter* (It's not really a market as such but really just a comparison between the net number of homes built and the number of homes our population growth (using past patterns of aged-based household formation) suggests we should be building.

The *trading* market, on the other hand, is a framework based around the desire to **own** a dwelling (not just the one you live in but rental properties, holiday homes, land-'banker' holdings etc.) This **is** a market. This is **the** market in which house prices are determined. *Fundamentals* do come into play for house prices, but they must concede to a number of other influences on the true demand and supply curves determining house prices.

MEASURING THE 'FUNDAMENTALS' IN 2010

The figure below presents the fundamental balance equation for year to June 2010. Net supply has generally increased by between 1.2% and 1.8% per annum over the past decade and is defined as 'completions less demolitions'. In the year to June 2010, net stock rose by 128,000 or 1.5%. On the other side, population growth, the age composition of that population and a small 'structural demand' for vacant dwellings suggests we demand an extra 165,000 homes¹. This 'demand' does not discriminate between owner-occupiers or renters nor does it consider whether affordability (purchase or rental) is impeding the formation of such households. It is conceptually, the 'desired demand' for a potential new household to have a roof over its head. The estimated 37,000 gap in 2010 should not imply this additional number of households is 'living on the street' – it is pent-up or unsatisfied demand - either because the stock is not available and/or affordability (both rental or purchase affordability) is temporarily inhibiting household formation.²

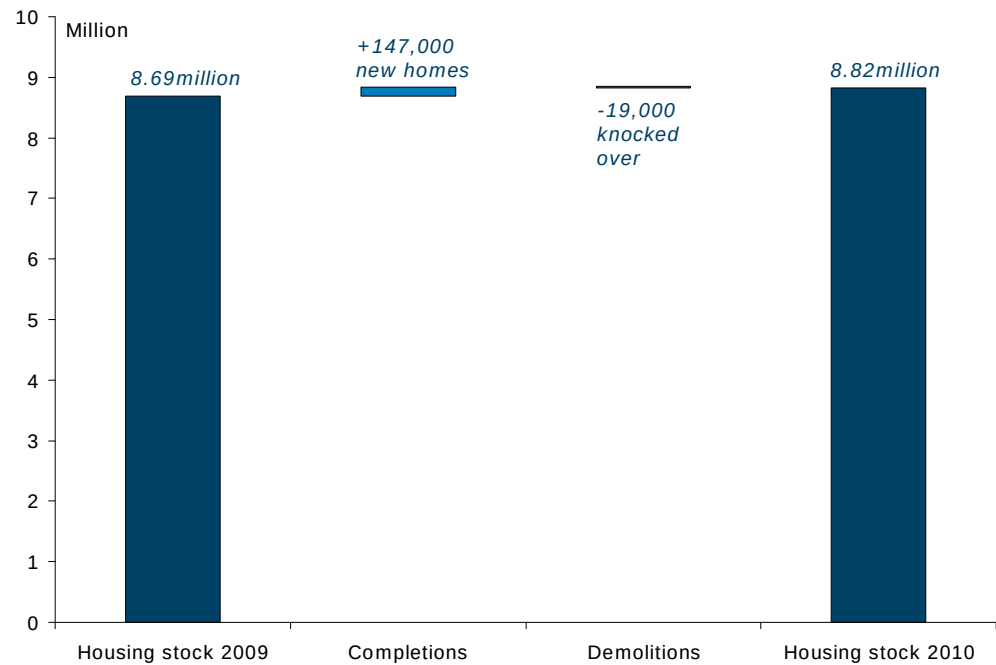
To the extent that living arrangement preferences shift structurally, the level of pent-up demand will be different. While there may be shifts at the margin as affordability delays household formation, a major lasting adjustment is implausible given the largely pre-determined impact that 'ageing' is likely to have on average 'persons per household' in the years ahead. While recent migrants tend to 'average up' persons per household during a 'settling in' period, this effect is diffused once a more permanent and desired living arrangement is achieved³.

¹ Some analysis expresses building requirement in gross terms, adding demolitions (19,000) to the net 165,000 in demand to come up with total underlying gross building requirement of around 184,000.

² This 37,000 is the *additional* shortage accumulated in that year. The total *stock* shortage is estimated at over 200,000.

³ ANZ Economics and Global Markets sensitivity analysis reveals that 'new migrant' and 'affordability' effects on average headship rates are likely to be not significant enough to counter the dwelling shortage.

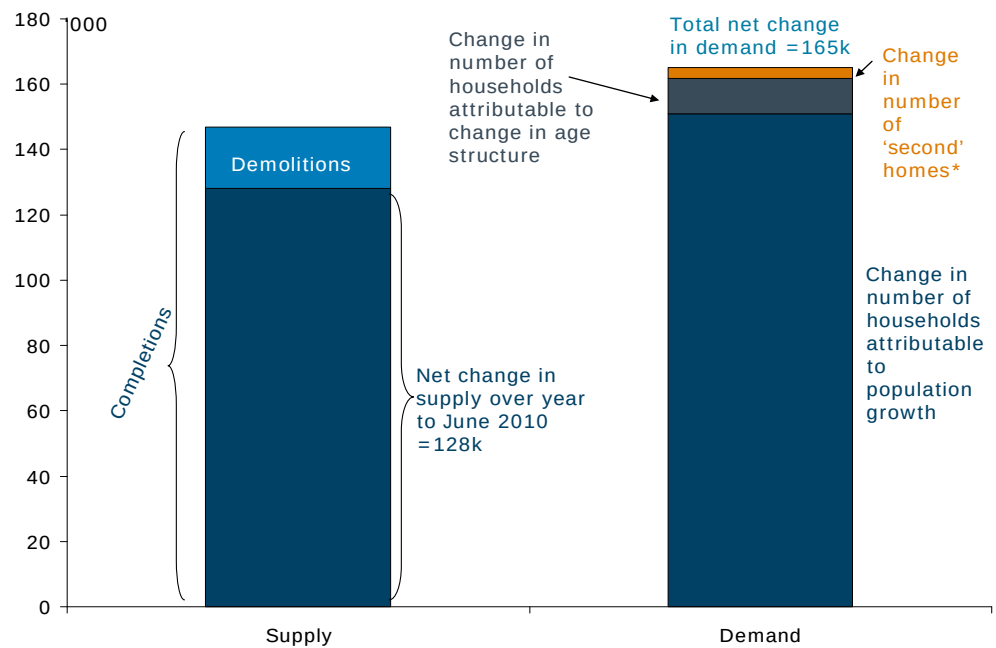
FIGURE 2. NET CHANGE IN HOUSING STOCK OVER 2010 WAS AROUND 128,000. ABOUT 1.5 % OF TOTAL



Sources: ABS, ANZ

FIGURE 3. FUNDAMENTAL SUPPLY - SHORT OF DEMOGRAPHIC DEMAND

Year to June 2010



*Includes holiday homes and other vacant dwellings. While the dwellings are vacant, they still represent a structural component of underlying demand

Sources: ABS, ANZ

ANATOMY OF THE TRADING MARKET

The stock of new dwellings ('fundamental' supply) and household formation (demographic demand) in the chart above are generally a second-order issue for 'high level' *trading* market conditions and therefore high level house price measures. As in all markets, it is *trading* activity that is the primary driver of price. But what do we know about it?

According to RP Data, Australia has achieved dwelling sales of between 400,000 and 500,000 annually in recent years. This is around 6% of the total stock of homes. Contrary to common perceptions, however, this sales data (or any sales data for that matter) represents **neither demand nor supply** very well. As is the case for most markets, the data is really only measuring the number of instances where both (1) demand and supply property attributes align **and** (2) are valued equally on both sides of the market. What is **not** seen is the much deeper components of the market, the unsatisfied, the less satisfied, the slightly 'dormant' to most 'dormant' components of the marketplace. It is the behaviour of these households that shape the observed turnover and price trends.

TRADING SUPPLY

At the extreme, at any point in time the supply-side includes all circa-9 million homes (owned by a circa-6 million households) plus a small component of unsold newly-built stock. More realistically though, there is a spectrum defined by the price elasticity of supply, rendering the vast majority of this supply not 'in the market'.

A stylised representation of this trading supply is shown below. Critically, the biggest proportion of the largest components (up-graders able to sell small homes), down-graders (able to sell big homes), divestors (able to sell homes) are 'off the market' at any point in time, whereas a high proportion of the very small components of 'forced sales' (due to stress, death etc.) are more likely to remain 'on market at market' until cleared at the best possible price.

For existing owner-occupiers (two thirds of dwelling stock), the decision to 'buy or not to buy' has an associated 'sell or not to sell' counterpart, acting as an implicit automatic stabiliser that neutralises price outcomes (although relative prices can shift dramatically depending on the location of the demand and supply shifts).

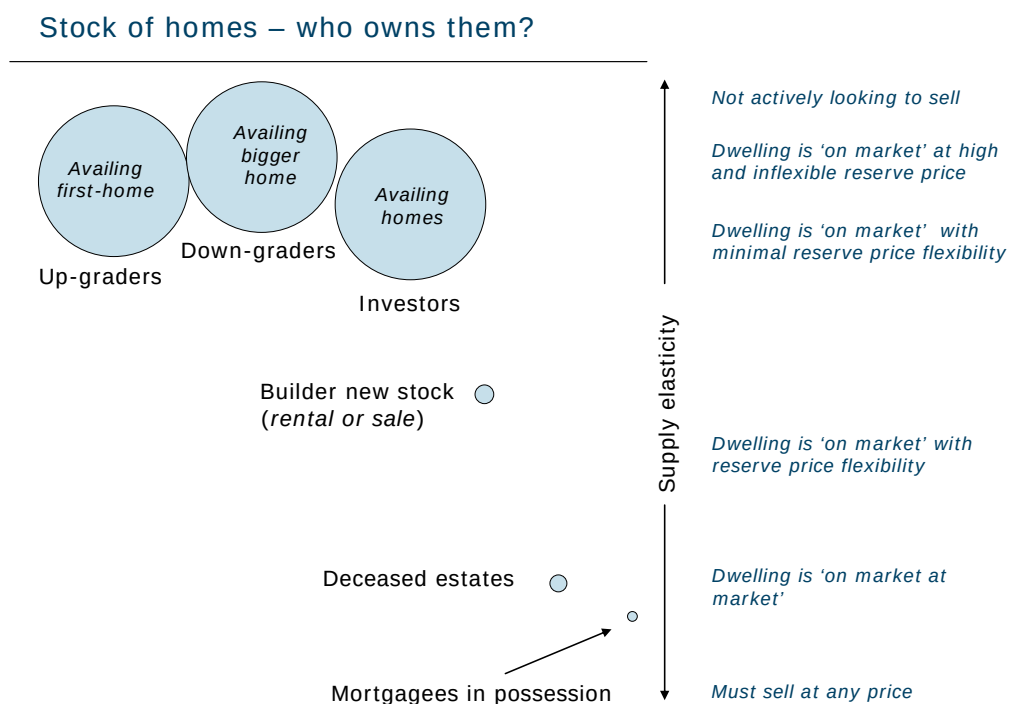
Therefore, it is first time potential owner-occupiers and investors that generally have greater scope to cause trading market imbalances. Price outcomes depend in large part upon the supply response to any changes in demand conditions. For instance, a downward shift in sentiment or re-rating of capital growth prospects for what ever reason generally leads to lower trading demand. Theoretically, price would fall as return benchmarks are adjusted on the demand side but with a supply-side withdrawal, the market works to re-calibrate to protect values.

There are limits to supply withdrawal (e.g. deceased estates and mortgagees in possession are generally not withdrawn from market if conditions soften) but with incomes growth offering a reliable structural support to prices over time and most investors having a time horizon beyond the typical period of cyclical weakness, they are likely 'sit it out' at least until trading demand returns to higher levels (e.g. purchase affordability improves, rentals rise, sentiment restores).

Supply-side flexibility has therefore been a persistent and critical source of house price resilience in the face of softer economic conditions and/or a sharp lift in interest rates.

Provided the mix of trading supply has a predominance of willing but not forced sellers, the self protecting supply mechanism will kick-in to avert prices from falling sharply. The balance between forced and discretionary supply comes down to economic conditions, the underlying 'quality' of household earnings, average loan vintages, lending criteria, the regulatory and legal structures that motivate lender and borrower behaviour and more generally the payment culture of the household sector. **On this score, Australia fares well and should continue to have a trading supply-side that is dominated by discretionary motives.**

FIGURE 4. STYLISED TRADING SUPPLY SPECTRUM



Vertical position of bubble represents stylised *average* supply elasticity.

Size of bubble represents estimated/stylised number of dwellings by characteristic of owner.

Sources: ANZ

TRADING DEMAND

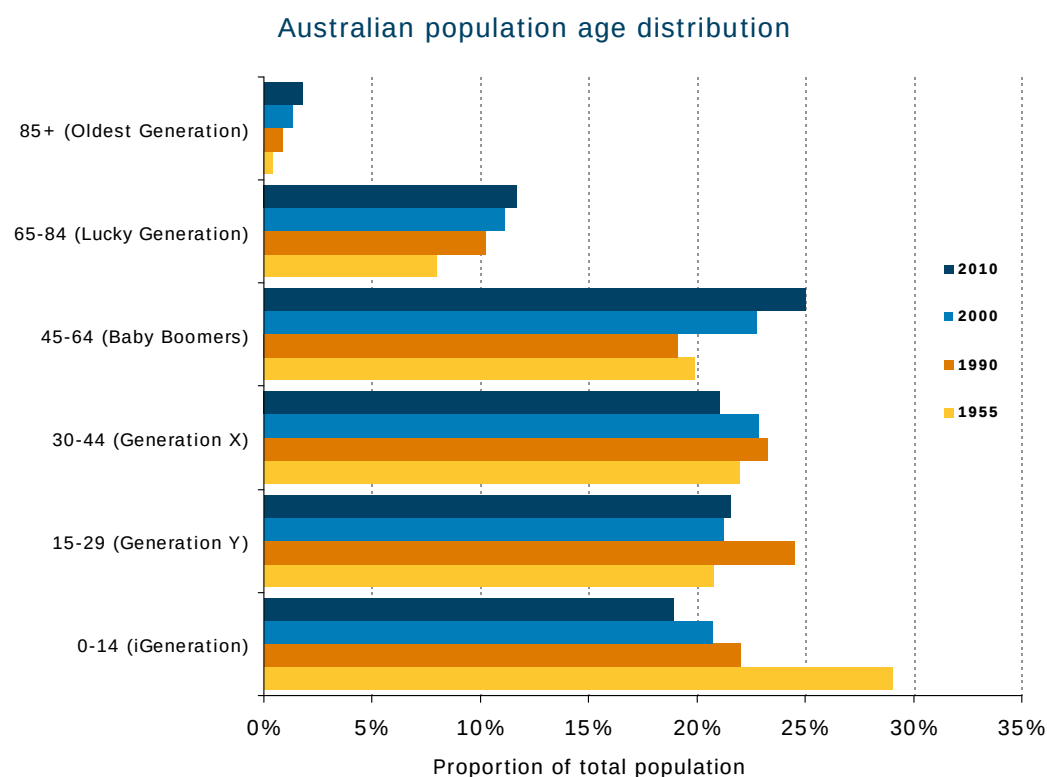
The demand side is born out of the same households that currently own the existing stock of dwellings (owner-occupiers and existing investors) plus renters, newly-forming households and accumulating investors (including foreign investors).

At any point in time, only a very small percentage of this universal potential demand is 'active'. Some demand can be mobilised easily, while other parts are less elastic or totally inelastic, depending on price, life style, life stage, life event and income.

The impact of trading demand on market outcomes depends also on the *source* of this demand. First time buyers (renters, persons living 'at home') represent net new potential trading demand. Investors (either first-time or accumulators) also represent net new potential trading demand. However, existing owner-occupier demand, as explained above, generally has an associated supply side to match that neutralises outcomes broadly. This is a powerful market stabiliser.

But what about a net divestment of housing stock by a particular population cohort (e.g. retiring 'baby-boomers')? This has been put forward by some as the 'Achilles heel' for the housing sector over the next few years.

FIGURE 5. PLENTY OF GEN 'Xs' and 'Ys' TO TRADE



Sources: ABS, ANZ

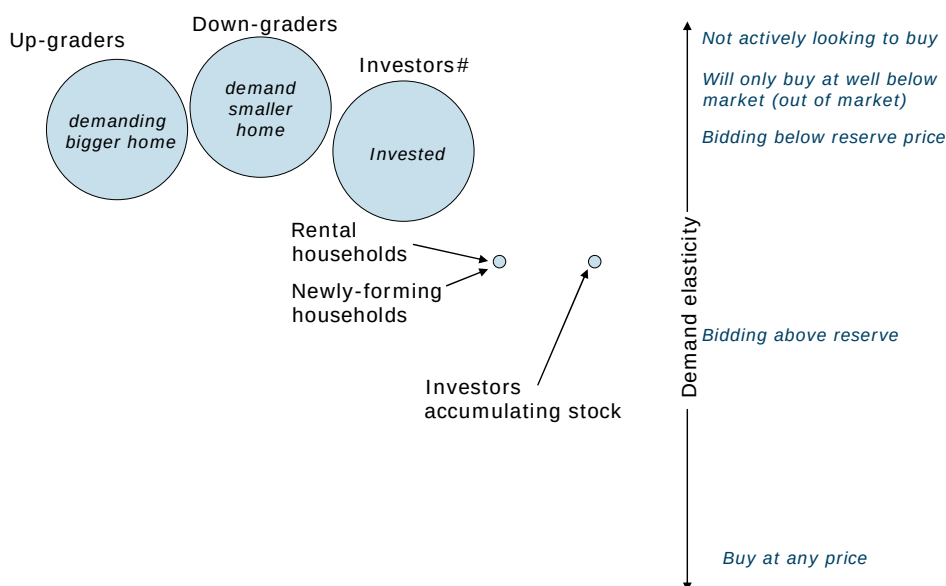
Portfolio re-allocation is a natural process ahead of and into retirement which could see housing fall as a share of this group's total asset pool. Several important points are worth making here:

- divestment by that component of population staging towards or being in retirement is not new;
- To the extent this divestment occurs, it is very likely going to be gradual, with life decisions generally blurring across age categories and over long periods of time;
- There is, however, a higher number of people moving to and through this life stage (baby-boomers) over the next decade or so. This suggests, at face value, a potential trading imbalance (supply greater than demand) that will weaken price. Critically, though, while baby-boomers represent 25% of total population, the number of Generation-Xs represent 21% and Generation-Ys a further 22% of population.

- The relativity between older and younger groups has shifted over the past couple of decades but given only a small proportion of these cohorts engage the housing market at any point in time, there is fickle ground for suggesting net divestment will be a significant market mover.
- The likely price driver over the medium-term will be **the average income levels of Generation 'Xs' and 'Ys'** who are in the prime home purchase (owner-occupier and investor) life stage. The effects of any 'baby-boomer' housing divestment will not be, on its own, significant at a macro level.

FIGURE 6. STYLISED TRADING DEMAND SPECTRUM

Stock of homes – who wants them?



Vertical position of bubble represents stylised average demand elasticity.

Size of bubble represents estimated/stylised number of dwellings in the command of that owner set.

includes land bankers and institutional demand.

Source: ANZ

The parameters surrounding the demand side (i.e. what householders are prepared to pay at the individual level) are determined by the common metrics as debt-servicing, expected future income, expected capital growth, debt preference, risk profile (borrower and lender) etc. and have been covered extensively (See [Housing Overvaluation](#)). Provided the average incomes of the home-purchasing age groups continue to rise, the financial underpinnings for house prices will remain solid.

WILL PRICES FALL IF AND WHEN MORE HOMES ARE BUILT?

The *net* overall price impact of a generalised national dwelling 'shortage' should be positive. This impact is likely to manifest through many micro-markets or precincts – ranging from those that are not offering sufficient new stock to satisfy very strong demand to large and lumpy additions in unpopular locations (reflected implicitly in price as a 'shortage premium' and 'surplus discount' respectively).

The interaction of fundamental supply and trading supply reveals more obviously in greenfield or 'establishing' localities where new builder stock is more likely to make up a greater percentage of total trading supply. But even then it is difficult to isolate this impact from *other* impacts on price. The market works well here and will shift relative prices accordingly.

Given the *overall* shortage, however, the *net* aggregate impact suggests an aggregate 'shortage premium', allowing prices to sustain at a higher level than that determined and validated by average incomes, (structural) interest rates and other structural supports.

To the extent this fundamental shortage persists, falling vacancies and higher rentals over the medium-term would be expected, signalling to stakeholders that investment fundamentals have improved. The premium should rise in these circumstances.

The 'shortage premium' in house prices will diminish, however, if fundamental supply constraints are resolved and more building occurs. This is more than likely going to manifest as a change in relative prices within the housing market but also as an absolute *reduction* in the price premium implicitly built into higher level measures of house prices⁴.

Unfortunately, there is little on the political, regulatory and economic horizon to suggest adequate supply (to reduce the shortage) is a realistic possibility within the next 5 years at least. A solid supply response if it did occur will, at best, alleviate pressures set to intensify over the medium-term, rather than something that will undermine market conditions.

Furthermore, a supportive economic backdrop and expected continued growth in average household incomes will provide a structural buffer for prices. The extended period of 'sideways prices drift' expected through 2011 will consolidate foundations for current price levels, reducing further the already low risk of a more substantial decline.

⁴ Data-providers construct various indexes using a bottom-up method, so micro-market trends should naturally feed through to aggregate measures.

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